

2.1.4. Number Administration. AT&T, at its option, may elect to use Ameritech's toll-free Service which includes toll-free Number Administration Service (NAS). With this service, Ameritech will perform the Responsible Organization service, which involves interacting with the national Service Management System (SMS/800), on behalf of the Customer. Responsible Organization services include activating, deactivating and maintaining 800/888 number records as well as trouble referral and clearance. If AT&T does not select NAS, AT&T will perform the Responsible Organization service.

2.2. LIDB Database Service.

2.2.1. The Line Information Database (LIDB) Query Response Service is a validation database system. It enables AT&T to offer alternately billed services to its Customers. The database provides an efficient way to validate calling cards and toll billing exception (TBE) (i.e., restricts a collect or third-party billed call). Toll fraud protection and reduced call set up expenses are among the benefits of the service.

2.2.2. Billing information records include the Customer name, phone number security personal identification numbers and third-party acceptance indications. Prior to call completion, a query is launched to the LIDB to determine the validity of the requested billing method. The call is then completed or denied based on the LIDB's response.

2.3. CNDS Database Service.

2.3.1 Caller ID identifies a calling party's telephone number through a switch-based feature installed in Ameritech's Central Office. CNDS is a CCIS/SS7 network based feature that accesses a CNDS database within the LIDB to provide a name associated with the calling party's telephone number. This service is provided using TR1188 protocol.

2.3.2 A Customer who subscribes to Caller ID with Name will see the listed name associated with the calling party's telephone line displayed on his/her Caller ID display unit. The telephone number associated with the telephone line of the calling party will also be displayed.

2.3.3 Ameritech shall charge AT&T for the CNDS Database Service in a similar manner to that which Ameritech charges AT&T for the LIDB Database Service, including a per query charge.

2.4 Local Number Portability.

2.4.1 Ameritech's provision of LNP will utilize LRN switch software based on requirements developed by the workshop participants and concurred in by the Commission. These requirements are fully compliant with the principles adopted by the

FCC in its First Report and Order, CC Docket No. 95-116 (the "Number Portability Order"). The detailed description and technical specifications for the planned LRN implementation can be found in various documents produced by the FCC Local Number Portability workshop.

2.4.2 Ameritech is fully prepared to provide LNP database access to AT&T. However, in adopting its Number Portability Order, the FCC referred certain technical and other issues to the North American Numbering Council (NANC) and issued a further notice addressing the recovery of costs associated with LNP implementation. Until these activities are concluded, Ameritech cannot finalize product descriptions and rates for access to its LNP database. Nonetheless, Ameritech is willing to begin discussions with AT&T to discuss AT&T's access to Ameritech's LNP databases in lieu of constructing AT&T's own.

2.5. Unbundled AIN Application Process.

2.5.1. The AIN architecture establishes a network infrastructure in which subscriber services can be defined and implemented independent from End-Office Switches. This is accomplished by a combination of SS7 signaling, interfaces between Network Elements and call-state models through which AIN Network Elements interact.

2.5.2. Ameritech's Unbundled AIN (Advanced Intelligent Network) Applications Access service will be provided on a nondiscriminatory basis and enable AT&T (whether it purchases unbundled switching capabilities from Ameritech or owns its own SSP (Service Switching Point)) to offer its Customers AIN services. Ameritech will make available existing AIN retail applications, as well as newly created services that AT&T creates via the Ameritech AIN Service Creation Environment (SCE) Access service. Unbundled AIN Applications Access provides for the AIN functionality necessary for the day to day ongoing call processing associated with a specific AIN applications execution. This includes the SS7 transport and SCP processing of the query associated with the specific service.

2.5.3. Associated with the AIN SCP is a Service Creation Environment (SCE) and a Service Management System (SMS). Ameritech offers access to the Ameritech SMS and SCE capabilities via two (2) AIN offerings: AIN Service Creation Environment Access Service and AIN Service Management System Access Service.

2.5.4. Carriers will share the common AIN infrastructure components provided by Ameritech, such as a Service Control Point (SCP), a Signaling Transfer Point (STP), Service Management System (SMS), and, if AT&T purchases Unbundled Switching from Ameritech, the AIN Service Switching Point (SSP). AT&T shall be responsible for assuring the compatibility of its AIN SSP software generics with the Ameritech AIN Applications and SCP software releases. Interconnection of the AT&T SSP with the Ameritech SS7 network is required, and can be accomplished in a number of ways.

2.5.5. Activation of the desired application at the Ameritech SCP requires subscription by both the ordering carrier AT&T and the end-user. In general, AIN operations require close cooperation between Ameritech and the requesting Carrier.

2.5.6. The SSP and SCP vendors provide logical capabilities which Ameritech uses to create each AIN service. The SSP and SCP vendors have no knowledge of the specific AIN Applications that Ameritech has created. Ameritech's AIN deployment is based on AIN 0.1.

3.1. AIN Service Creation Environment Access Service.

Access to Ameritech's AIN service creation functionality will be provided in a nondiscriminatory manner to AT&T to enable it to create new AIN services on Ameritech's network. If AT&T has a new AIN service concept, it can utilize all or some of the features below to obtain a fully functional AIN service. Ameritech will furnish AT&T with a list of AIN Applications and the switches on which such applications are available, including the software version of AIN on such switch type. The following is a list of AIN service creation functions available via this service offering:

3.1.1. Service Concept Description: The description of service idea should detail requirements such as: dialing patterns, information exchange, announcements, voice prompts, expected service management screens and reports, and CPE requirements. The AIN service creation functions made available to AT&T must be the same ones Ameritech uses, subject to any third party restrictions Ameritech may be subject to.

3.1.2. Creation of Technical Specification: Translation of a new service description into a technical specification including engineering requirements for Ameritech's network. The technical specification must detail how the service interacts in the network, translated in network terms, should include any expected/anticipated feature interaction discrepancies, and will include the process flows on how the service traverses the network.

3.1.3. Service Logic Design: The development of service design from SCP perspective to include Algorithms, Data Structures and Flow Diagrams.

3.1.4. Service Logic Coding: Development of machine logic in the SCE to include tables, SIBBs, and other elements as necessary.

3.1.5. Service Logic Testing: Service logic testing isolated within the to SCE to ensure accuracy of compilation and code development and compliance with Ameritech's AIN environment.

3.1.6. SMS Interface Requirements: Development of AT&T SMS interface access including screens, flow-through interface and reports. This is required to allow AT&T to activate, update, modify, and administer Customer data associated with the new service.

3.1.7. Platform Access Logic Configuration: Service specific updates to global infrastructure required to enable new service. Includes modification of the access logic to enable a new service.

3.1.8. Service Integration Testing (SIL): Intensive laboratory testing of service in conjunction with all Ameritech Switch types and or provider switch types and generics (as necessary) to minimize potential feature interaction conflicts and negative network reactions. Resources must be made available to AT&T on a nondiscriminatory basis.

3.1.9. Network Implementation: Conditioning of the SMS, SCP, SSP, or STP to accept service including network translations, signaling connectivity, dialing plans, and coordination of provisioning process.

3.1.10. Field Testing: Comprehensive controlled testing in a live switch environment, possibly at AT&T's SSP location.

3.2. AIN Service Management System Access Service.

3.2.1. Access to Ameritech's AIN service management system functionality will be provided in a nondiscriminatory manner to AT&T to enable it to manage AIN services located wholly within Ameritech's network (SCP & SSP) or to manage AIN services where the service logic is located within Ameritech's SCP and the Customer is served from AT&T's AIN-compatible SSP. Upon request of AT&T, Ameritech shall provide AT&T the unbundled AIN Applications Access service product description and a list of existing Ameritech AIN applications.

3.2.2. The Service Management System (SMS) is the administration system for the service logic and data in the Advanced Intelligent Network (AIN) Service Control Point (SCP). The SMS contains the master copy of service level, subscriber level and subscription level data. The SMS also contains a copy of the service logic.

Logical access to the SMS will be managed by a set of programs designed by Ameritech. These programs provide security for the data that resides on the AIN platforms by allowing user access to only specific data that is appropriate to the customer or carrier. Whether explicitly stated in this document or not, all access to the SMS is managed through these programs. The only exceptions to managed access to SMS functionality are for the Ameritech Network Services organizations that administer the AIN platforms. They require direct access in order to appropriately administer the platforms.

Mediated access to SMS functionality will be provided through interface programs that will be developed for specific services. AT&T will have access to all of the data that the service requires in order to administer that service for its Customers. This includes service level,

subscriber level, and subscription level data as well as any reports and measurement data that is mutually agreed upon by Ameritech and AT&T.

3.2.3. Service Logic. The SMS receives a copy of the service logic and service management logic from the Service Creation Environment (SCE) system. After population of specific network level and service level data, the SMS downloads a view of the service logic to the designated SCPs. The service management logic remains in the SMS to complement SMS utilities in the monitoring and administration of a specific service.

It is required that all of the Service Creation unit testing, System Integration Lab (SIL) testing and Network Deployment Testing has been completed.

It may be necessary for AT&T to negotiate timing and supply service specific data before that service can be deployed in the appropriate SCPs. Ameritech, however, is totally responsible for service logic deployment and initial SCP memory load in its network. AT&T will receive timing and supply of service specific data in a nondiscriminatory manner.

3.2.4. Service Administration. Service administration involves the management of service level data which the service logic requires for its execution. SMS supports the management of service specific common data. Any changes to the data representation of the Ameritech network, which impact one or more carrier services will be administered by Ameritech. Other AT&T specific or service specific data changes will be identified and administered by AT&T.

SCHEDULE 9.2.6

OPERATIONS SUPPORT SYSTEMS FUNCTIONS

1.0 Pre-Ordering, Ordering and Provisioning. Ameritech will use the interface described in Section 10.13.2(a) (including the separate interface used for ordering prior to the first quarter of 1997) for the transfer and receipt of data necessary to perform the pre-ordering, ordering, and provisioning functions (e.g., order entry, telephone number and due date selection). However, the Access Services Request (ASR) interface will be used for the transfer of information concerning the Network Elements and Combinations which AT&T intends to order in a specific Wire Center ("Footprint" or "Trunk Side Information").

2.0 Maintenance and Repair. Ameritech will use the interface described in Section 10.13.3(a) for the transfer and receipt of data necessary to perform the maintenance and repair functions (e.g., trouble receipt and trouble status).

3.0 Billing. Ameritech will provide appropriate usage data to AT&T to facilitate Customer billing with attendant acknowledgments and status reports and exchange information to process claims and adjustments.

SCHEDULE 9.2.7

OPERATOR SERVICES AND DIRECTORY SERVICES

1.0 Operator Services. Operator Services consist of the following services.

1.1 Manual Call Assistance - manual call processing with operator involvement for the following:

(a) **Calling card** - the Customer dials 0+ or 0- and provides operator with calling card number for billing purposes.

(b) **Collect** - the Customer dials 0+ or 0- and asks the operator to bill the call to the called number, provided such billing is accepted by the called number.

(c) **Third number billed** - the Customer dials 0+ or 0- and asks the operator to bill the call to a different number than the calling or called number.

(d) **Operator assistance** - providing local and intraLATA operator assistance for the purposes of:

- (1) assisting Customers requesting help in completing calls or requesting information on how to place calls;
- (2) handling emergency calls;
- (3) handling credits and coin telephone local refund requests; and
- (4) handling person-to-person calls.

(e) **Operator Transfer Service ("OTS")** - calls in which the Customer dials "0", is connected to an Ameritech operator and then requests call routing to an IXC subscribing to OTS. The operator will key the IXC's digit carrier identification code to route the Customer to the requested IXC's point of termination.

(f) **BLV** - Service in which operator verifies a busy condition on a line.

(g) **BLVI** - service in which operator, after verifying a busy line, interrupts the call in progress.

1.2 Automated Call Assistance - mechanized call processing without operator involvement for the following:

(a) Automated calling card service ("ACCS") - the Customer dials 0 and a telephone number, and responds to prompts to complete the billing information.

(b) Automated Alternate Billing Service ("AABS") -

(1) the Customer dials 0 and a telephone number and responds to prompts to process the call and complete the billing information (Customer branding not currently available).

(2) ACCS calculates charges, relates the charge to the Customer, and monitors coins deposited before connecting the 1 + intraLATA or interLATA call.

1.3 Line Information Database ("LIDB") Validation - mechanized queries to a LIDB for billing validation.

1.4 Database Access - To the extent technically feasible, Ameritech will provide access to databases used in the provisioning of Operator Services via AT&T's Bona Fide Request.

2.0 **Directory Assistance.** Directory Assistance ("DA") service shall consist of the following services.

2.1 Directory Assistance - those calls in which the Customer dial digits designated by AT&T to obtain Directory Assistance for local numbers located within his/her NPA. Two listings will be provided per call.

2.2 Branding - the ability to put messages on the front end of a DA call that is directly trunked into Ameritech's DA switch.

2.3 Information Call Completion - provides a Customer who has accessed the DA service and has received a number from the Audio Response Unit ("ARU") the option of having an intraLATA call completed by pressing a specific digit on a touch tone telephone. Information Call Completion is only available to AT&T if it direct trunks its DA calls to Ameritech.

2.4 Upon request, and through a technically feasible arrangement, Ameritech will provide access to databases used in the provisioning of DA via AT&T's Bona Fide Request at rates that recover Ameritech's costs of developing, providing and maintaining the service. Such unbundled access to the DA database shall be for the purpose of having AT&T's Telephone

Exchange Service DA listing in the area placed into Ameritech's DA database, or to enable AT&T to read DA listing in the database so that AT&T can provide its own DA service.

3.0 Rate Application. Ameritech shall bill AT&T the applicable rates on a monthly basis, in accordance with the following methodology:

3.1 Manual Call Assistance - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls, whether or not they are completed.

3.2 Automated Call Assistance (ACCS and AABS) - call occurrences multiplied by the per call occurrence rate. Total call occurrences shall include all processed calls, whether or not they are completed.

3.3 LIDB Validation - validation occurrences multiplied by the LIDB validation per occurrence rate. Total validation occurrences shall include all validations, whether or not the call is completed. Ameritech will accumulate operator occurrences, automated occurrences, and LIDB validation occurrences via its Operator Services Call Analysis System ("OSCAS"). OSCAS utilizes TOPS AMA recordings to produce monthly summaries of mechanized and manual call occurrences.

3.4 BLV - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.5 BLVI - operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.

3.6 Lost Records. If Ameritech is responsible for lost, destroyed, or mutilated TOPS AMA recordings, Ameritech will not bill AT&T for those calls for which there are no records. Likewise, Ameritech shall not be held responsible by AT&T for lost revenue. However, if within ninety (90) days, actual data should become available, Ameritech will bill AT&T for those calls using actual data.

SCHEDULE 9.3.4

COMBINATIONS

1. **Unbundled Element Platform with Operator Services and Directory Assistance.**

Unbundled Loop
Local Switching
Operator Services and Directory Assistance
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

2. **Loop Combination**

Unbundled Loop
Network Interface Device

3. **Switching Combination #1**

Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

SCHEDULE 9.3.5

COMBINATIONS AVAILABLE THROUGH BONA FIDE REQUEST

1. Loop/Network Combination

Unbundled Loop
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

2. Switching Combination #2

Network Interface Device
Local Switching
Shared Transport
Dedicated Transport
SS7 Message Transfer & Connection Control
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

3. Switching Combination #3

Network Interface Device
Local Switching
Operator Systems
Shared Transport
Dedicated Transport
SS7 Message Transfer & Connection Control
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

4. Switched Data Services

Network Interface Device

Local Switching

Shared Transport

Dedicated Transport

Tandem Switching

5. Unbundled Element Platform Without Operator Services and Directory Assistance

Unbundled Loop

Local Switching

Shared Transport

Dedicated Transport

STPs

Signaling Link Transport

Service Control Points (SCPs)/Databases

Tandem Switching

SCHEDULE 9.5

PROVISIONING OF NETWORK ELEMENTS

1.0 General Provisioning Requirements.

- 1.1 Subject to the terms of Article IX, AT&T may order and/or request Elements either individually or as Combinations.
- 1.2 The Combinations set forth on Schedule 9.3.4 and any additional Combination provided previously hereunder by Ameritech pursuant to the Bona Fide Request process shall be identified and described by AT&T so that they can be ordered and provisioned as a Combination and shall not require the enumeration of each Network Element within that Combination on each provisioning order; provided that in each case AT&T shall specify on each order the type of service to be provided as well as the engineering and routing characteristics (e.g., redundancy requirements and data transfer rates) AT&T requests for such Combination.
- 1.3 AT&T may order from Ameritech multiple individual Network Elements on a single order without the need to have AT&T send an order for each such Network Element if such Network Elements are (i) for a single type of service, (ii) for a single location and (iii) for the same account.
- 1.4 Ameritech shall provide provisioning services to AT&T Monday through Friday from 8:00 a.m. to 5:00 p.m. CST. AT&T may request Ameritech to provide Saturday, Sunday, holiday, and/or off-hour provisioning services. If AT&T requests that Ameritech perform provisioning services at times or on days other than as required in the preceding sentence, Ameritech shall quote, within three (3) Business Days of the request, a cost-based rate for such services. If AT&T accepts Ameritech's quote, Ameritech shall perform such provisioning services.
- 1.5 Ameritech shall provide a Single Point of Contact (each, a SPOC) for ordering and provisioning contacts and order flow involved in the purchase and provisioning of Ameritech's unbundled Network Elements or Combinations. The SPOCs shall provide an electronic interface twenty-four (24) hours a day, seven (7) days a week for all ordering and provisioning order flows. Each SPOC shall also provide to AT&T a toll-free nationwide telephone number (operational from 8:00 a.m. to 5 p.m., Monday through Friday) which will be answered by capable staff trained to answer questions and resolve problems in connection with the provisioning of Network Elements or Combinations.

- 1.6 Ameritech shall provide to AT&T a single point of contact (the **"Unbundling Ordering Center"**) for ordering unbundled Network Elements. A national toll-free number will be provided from 7:00 a.m. to 5:00 p.m. CST, Monday through Friday. This Unbundling Ordering Center is responsible for order acceptance, order issuance, and return of the Firm Order Commitment (FOC) to AT&T as specified in this Schedule 9.5.

In addition, Ameritech shall provide to AT&T a single point of contact (the **"Unbundling Service Center"**) for all provisioning, maintenance, repair, and cutover coordination. A national toll-free number will be provided from 6:30 a.m. to 12:00 a.m. CST Monday through Friday. Out of hours maintenance questions are handled by a **"Fold Down Center."**

- 1.7 Ameritech will recognize AT&T as the Customer of Record of all Network Elements and agreed to Combinations ordered by AT&T and will send all notices, invoices and pertinent Customer information directly to AT&T.
- 1.8 Ameritech may not initiate any disconnection or rearrangement of any AT&T ordered Element or Combination, except as directed by AT&T or as otherwise provided in this Agreement.
- 1.9 When requested by AT&T, Ameritech will schedule installation appointments with Ameritech's representative on the line with AT&T's representative until AT&T has access to Ameritech's scheduling system.
- 1.10 Ameritech will provide AT&T with a Firm Order Confirmation (FOC) for each order, within twenty-four (24) hours of Ameritech's receipt of that order, or within a different time interval agreed upon by the Implementation Team. The FOC must contain an enumeration of AT&T's ordered Network Elements or Combination features, options, physical Interconnection, quantity, and Ameritech commitment date for order completion (**"Committed Due Date"**), which commitment date shall be established on a nondiscriminatory basis with respect to installation dates for comparable orders at such time.
- 1.11 Upon work completion, Ameritech will provide AT&T electronically (unless otherwise notified by AT&T) with an order completion per order that states when that order was completed. Ameritech shall respond with specific order detail as enumerated on the FOC and shall state any additional charges (e.g., time and materials charges) up to a previously agreed upon limit associated with that order.

- 1.12 Ameritech will perform pre-testing of Network Elements and Combinations in accordance with Ameritech's standards. At AT&T's request, Ameritech will make available to AT&T on a weekly batch basis any available test and turn-up results in support of the Network Elements or Combinations ordered by AT&T. AT&T shall be responsible for any costs incurred by Ameritech to provide copies of any available results. If AT&T requests Ameritech to provide AT&T with any test or turn-up results which Ameritech does not then generate, AT&T shall request such results through the Bona Fide Request process.
- 1.13 As soon as identified, Ameritech shall provide notification electronically of AT&T orders that are incomplete or incorrect and therefore cannot be processed.
- 1.14 As soon as identified, Ameritech shall provide notification electronically of any instances when Ameritech's Committed Due Dates are in jeopardy of not being met by Ameritech on any element or feature contained in any order for Network Elements or Combinations. Ameritech shall indicate its new committed due date as soon as such date is available.
- 1.15 Within twenty-four (24) hours of AT&T's request, Ameritech will perform cooperative testing with AT&T (including trouble shooting to isolate any problems) to test Network Elements or Combinations purchased by AT&T in order to identify any performance problems.
- 1.16 Subject to Article IX, Network Elements and Combinations will be provisioned with a combination of customer-specific and bulk orders as specified by AT&T.
- 1.17 When AT&T orders Network Elements or Combinations that are currently interconnected and functional and remain interconnected to the same adjacent Network Elements, such Network Elements and Combinations will remain interconnected and functional without any disconnection or disruption of functionality of such Network Elements. There shall be no charge for such interconnection. Consequently, for Ameritech retail Customers who simply wish to switch their local service providers and keep the same type of service provided through the same equipment, this method of ordering will accomplish this with no physical changes required in the existing Network Elements. Under these circumstances, it shall not be necessary for AT&T to collocate equipment in Ameritech Central Offices to connect the unbundled Network Element. If shared Network Elements are used, Ameritech will be responsible for all engineering, provisioning and maintenance of these components to ensure they support the agreed-upon grade of service.

1.18 Ameritech shall provide to AT&T upon request:

- (a) a list of all services and features technically available from each switch that Ameritech may use to provide Local Switching, by switch CLLI;
- (b) a listing by street address detail, of the service coverage area of each switch CLLI;
- (c) when available, all engineering design and layout information for each Network Element and Combination; provided that AT&T shall pay Ameritech for the costs incurred by Ameritech to provide AT&T with copies of such information;
- (d) a listing of all technically available functionalities for each Network Element or Combination; and
- (e) advanced information on the details and requirement for planning and implementation of NPA splits.

1.19 Promptly after the Effective Date, Ameritech shall provide AT&T an initial electronic copy of the following information:

- (a) Street address verification;
- (b) Switch identification by service address; and
- (c) Switch feature verification.

Electronic updates to such information shall be provided monthly to AT&T as changes are made to such information.

1.20 For orders of Network Elements (and INP with the installation of a Loop) that require coordination among Ameritech, AT&T and AT&T's Customer, AT&T shall be responsible for any necessary coordination with the AT&T Customer.

2.0 Unbundled Local Loop Transmission

2.1 Access to Unbundled Local Loops.

2.1.1 AT&T shall access Ameritech's Unbundled Local Loops via Collocation or in accordance with Article IX of this Agreement at the Ameritech Wire Center where that element exists and each Loop shall be delivered to AT&T's Collocation by means of a Cross-Connection, which shall be an additional charge.

2.1.2 Ameritech shall provide AT&T access to its unbundled Loops at each of Ameritech's Wire Centers. In addition, if AT&T requests one or more Loops serviced by Integrated Digital Loop Carrier or Remote Switching technology deployed as a Loop concentrator, Ameritech shall, where available, move the requested Loop(s) to a spare, existing physical Loop at no charge to AT&T. If, however, no spare physical Loop is available, Ameritech shall within forty-eight (48) hours of AT&T's request notify AT&T of the lack of available facilities. AT&T may then at its discretion make a Bona Fide Request for Ameritech to provide the unbundled Loop through the demultiplexing of the integrated digitized Loop(s). Notwithstanding anything to the contrary in this Agreement, the provisioning intervals set forth in Section 2.2.2 of this Schedule and the Ameritech Network Element Performance Benchmarks set forth in Schedule 9.10 of this Agreement shall not apply to unbundled Loops provided under this Section 2.1.2.

2.1.3 If AT&T orders a Loop type and the distance requested on such Loop exceeds the transmission characteristics as referenced in the corresponding Technical Reference specified below, distance extensions may be requested where technically feasible to meet the specification using such distance extensions and additional rates and charges shall apply as set forth at Item V of the Pricing Schedule.

Loop Type	Technical Reference/Limitation
Electronic Key Line	2.5 miles
ISDN	Bellcore TA-NWT-000393
HDSL 2W	T1E1 Technical Report Number 28
HDSL 4W	T1E1 Technical Report Number 28
ADSL 2W	ANSI T1.413-1995 Specification

2.2 Provisioning of Unbundled Loops.

The following coordination procedures shall apply for conversions of "live" Telephone Exchange Services to unbundled Network Elements:

2.2.1 AT&T shall request unbundled Loops from Ameritech by delivering to Ameritech a valid electronic transmittal service order (a "Service Order") using the electronic interface described on Schedule 9.2.6. Within twenty-four (24) hours of Ameritech's receipt of a Service Order, Ameritech shall provide AT&T the firm order commitment ("FOC") date according to the applicable Ameritech Network Element Performance Benchmarks set forth in Section 9.10 of this Agreement by which the Loop(s) covered by such Service Order will be installed.

2.2.2 Ameritech shall provision unbundled Loops in accordance with the time frames set forth on Schedule 9.10 or within such other intervals as agreed upon by the Parties.

2.2.3 Ameritech agrees to coordinate with AT&T at least forty-eight (48) hours prior to the due date a scheduled conversion date and time (the "Scheduled Conversion Time") in the "A.M." (12:00 midnight to 12:00 noon) or "P.M." (12:00 noon to 12:00 midnight) (as applicable, the "Conversion Window").

2.2.4 Not less than one (1) hour prior to the Scheduled Conversion Time, either Party may contact the other Party and unilaterally designate a new Scheduled Conversion Time (the "New Conversion Time"). If the New Conversion Time is within the Conversion Window, no charges shall be assessed on or waived by either Party. If, however, the New Conversion Time is outside of the Conversion Window, the Party requesting such New Conversion Time shall be subject to the following:

If Ameritech requests the New Conversion Time, the applicable Line Connection Charge shall be waived; and

If AT&T requests the New Conversion Time, AT&T shall be assessed a Line Connection Charge in addition to the Line Connection Charge that will be incurred for the New Conversion Time.

2.2.5 Ameritech shall test for AT&T dial-tone ("Dial Tone Test") at Ameritech's MDF for AT&T's Virtual Collocated equipment or Physical Collocated equipment during a window not greater than forty-eight (48) hours but not less than eight (8) hours prior to the Scheduled Conversion Time (or New Scheduled Time, as applicable). Ameritech shall perform the Dial Tone Test at no charge until the termination of this Agreement.

2.2.6 Except as otherwise agreed by the Parties for a specific conversion, the Parties agree that the time interval expected from disconnection of "live" Telephone Exchange Service to the connection of an unbundled Network Element at the AT&T Collocation interface point will be sixty (60) minutes or less. If a conversion interval exceeds sixty (60) minutes and such delay is caused solely by Ameritech (and not by a Delaying Event), Ameritech shall waive the applicable Line Connection Charge for such element. If AT&T has ordered INP with the installation of a Loop, Ameritech will coordinate the implementation of INP with the Loop conversion during the sixty (60) minute interval at no additional charge.

2.2.7 Requests for maintenance or repair of unbundled Loops are initiated using the industry standard "electronic bonding" interface (EBI) and are handled by the Ameritech Unbundling Service Center ("USC"). The USC works with local Ameritech personnel to perform any manual testing that may be required to isolate the trouble.

3.0 Network Interface Device Capability.

3.1 Ameritech will provide AT&T access to NIDs in a manner that will permit AT&T to connect its loop facilities to the Customer's inside wiring through Ameritech's NID, as required. AT&T shall establish this connection through an adjoining NID provided by AT&T.

3.2 Due to the wide variety of NIDs utilized by Ameritech (based on Customer size and environmental considerations), AT&T may access the Customer's inside wire by any of the following means:

(a) Where an adequate length of inside wire is present and environmental conditions permit, AT&T may remove the inside wire from Ameritech's NID and connect that wire to AT&T's NID;

(b) Enter the Customer access chamber or "side" of "dual chamber" NID enclosures for the purpose of extending a connectorized or spliced jumper wire from the inside wire through a suitable "punch-out" hole of such NID enclosures;

(c) Enter Ameritech's loop terminal enclosure located at a multiple dwelling unit ("MDU") for the purpose of accessing Customer premises inside wire and extending such wire to AT&T's own adjoining NID; or

(d) Request Ameritech to make other rearrangements to the inside wire terminations or terminal enclosure on a time and materials cost basis to be charged to the requesting party (i.e., AT&T, its agent, the building owner or the Customer).

3.3 If AT&T accesses the Customer's inside wire as described in Section 2.2(d), the time and materials charges will be billed to the requesting party (i.e., AT&T, the building owner or the Customer).

3.4 In no case shall AT&T remove or disconnect Ameritech's loop facilities from Ameritech's NIDs, enclosures, or protectors.

3.5 In no case shall AT&T remove or disconnect ground wires from Ameritech's NIDs, enclosures, or protectors.

3.6 Maintenance and control of premises wiring (inside wire) is the responsibility of the Customer. Any conflicts between service providers for access to the Customer's inside wire must be resolved by the Customer.

3.7 Due to the wide variety of NID enclosures and outside plant environments, Ameritech will work with AT&T to develop specific procedures to establish the most effective means of implementing this Section 3.0.

4.0 Unbundled Local Switching

4.1 Access to Unbundled Local Switching.

4.1.1 AT&T shall access Ameritech's Unbundled Local Switching via Collocation or in accordance with Article IX of this Agreement at the Ameritech Wire Center where that element exists and each line-side and/or trunk-side port will be delivered to AT&T's Collocation by means of a Cross-Connection, which shall be an additional charge.

4.1.2 Ameritech shall provide AT&T access to its Unbundled Local Switching at each of Ameritech's Wire Centers and will provide AT&T all available basic local switching functions and basic capabilities the switch is capable of providing which Ameritech currently makes available to its local Customers, or for which Ameritech OSS functions are capable of provisioning pursuant to a Bona Fide Request.

4.1.3 Unbundled Local Switching also provides access to additional features and capabilities that the switch has available for activation. AT&T has the capability of activating these features on a line-by-line basis via an electronic interface. The additional features available for activation on the basic Unbundled Local Switching include:

- (a) vertical features;
- (b) Custom Calling, Custom Local Area Signaling Service features ("CLASS") features; and
- (c) Centrex features.

4.1.4 Other basic and/or additional capabilities, functions and features that are not then available for activation on the switch may be requested as optional special capabilities. Ameritech will provide these special capabilities if technically feasible and upon AT&T's Bona Fide Request. AT&T will pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the requested capability.

4.1.5 Unless already provided by Ameritech as a service offering, and if not, upon AT&T's Bona Fide Request, Ameritech will provide any technically feasible customized local routing of traffic through Unbundled Local Switching by class of call (e.g., operator, directory assistance, 9-1-1, toll, local, etc.). Ameritech will develop and provide any requested customized routing the switch is capable of providing, upon agreement by AT&T to pay recurring and nonrecurring costs of developing, installing, updating, providing and maintaining such custom routing.

4.1.6 Ameritech provides, on an optional basis, the ability to connect line-side ports and/or trunk-side ports within the same switch with a group of common attributes. An example, is a request for Unbundled Local Switching to provide a Centrex service with intercom calling within the system and with certain common features. The attributes available include intercom calling, group call pick-up, and Automatic Route Selection. Intercom calling is defined as the ability of the line-side ports to call one another by dialing 3-7 digits. Group call pick up is defined as allowing one line-side port to answer a call directed to another line-side port in the same call pick-up group. ARS is defined as the ability to route calls to a specific group of trunk-side ports.

4.1.7 Ameritech will switch traffic through its local switching element in accordance with Ameritech standard switching translations and screening in use in that switch. The custom routing optional feature enables AT&T to specify special routing, by class of call, of some or all traffic incoming into its unbundled local switch using any technically feasible routing capability of that switch. Variations in the End Office switching equipment used to provide service in specific locations may cause differences in the operation of certain features. Special routing capabilities that are not otherwise available (i.e., features that the switch is capable of providing) will be developed on an individual basis through the Bona Fide Request process and will be installed, updated, maintained and provided following AT&T's agreement to pay the applicable costs.

4.2 Provisioning of Unbundled Local Switching.

The following coordination procedures shall apply for conversions of "live" Telephone Exchange Services to unbundled Network Elements:

4.2.1 AT&T shall request Unbundled Local Switching from Ameritech by delivering to Ameritech a valid electronic transmittal service order (a "Service Order") using the electronic interface described on Schedule 9.2.6. In addition, pre-ordering functions are supported via electronic data interchange (EDI) format as utilized for Resale Services. Within twenty-four (24) hours of Ameritech's receipt of a Service Order, Ameritech shall provide AT&T the firm order commitment ("FOC") date by which the Unbundled Local Switching ports covered by such Service Order will be installed.

Where connection of the Unbundled Local Switching port(s) to customized routing is required by AT&T, the specific custom routing pattern desired must already exist. In those instances where the custom routing pattern does not already exist, AT&T may request the development and establishment of such customer routing pattern via a Bona Fide Request. While the custom routing pattern is being developed, AT&T may do one of the following: (a) defer activation of the Unbundled Local Switching port until the routing pattern is established, (b) offer the Customer resale on an interim basis, or (c) convert the existing basic office routing pattern. If AT&T elects option (c) and later desires to convert the Unbundled Local Switching port using Ameritech's office routing pattern to a customized routing pattern, an additional Line Connection Charge will apply.

4.2.2 Ameritech agrees to coordinate with AT&T at least forty-eight hours prior to the due date a scheduled conversion date and time (the "Scheduled Conversion Time") in the "A.M." (12:00 midnight to 12:00 noon) or "P.M." (12:00 noon to 12:00 midnight) (as applicable, the "Conversion Window").

4.2.3 Not less than one (1) hour prior to the Scheduled Conversion Time, either Party may contact the other Party and unilaterally designate a new Scheduled Conversion Time (the "New Conversion Time"). If the New Conversion Time is within the Conversion Window, no charges shall be assessed on or waived by either Party. If, however, the New Conversion Time is outside of the Conversion Window, the Party requesting such New Conversion Time shall be subject to the following:

If Ameritech requests the New Conversion Time, the applicable Line Connection Charge shall be waived; and

If AT&T requests the New Conversion Time, AT&T shall be assessed a Line Connection Charge in addition to the Line Connection Charge that will be incurred for the New Conversion Time.

4.2.4 Except as otherwise agreed by the Parties for a specific conversion, the Parties agree that the time interval expected from disconnection of "live" Telephone Exchange Service to the connection of an unbundled Network Element at the AT&T Collocation interface point will be sixty (60) minutes or less. If a conversion interval exceeds sixty (60) minutes and such delay is caused solely by Ameritech (and not by a Delaying Event), Ameritech shall waive the applicable Line Connection Charge for such element.

If AT&T has ordered INP with the installation of a Loop, Ameritech will coordinate the implementation of INP with the Loop conversion during the sixty (60) minute interval at no additional coordination charge (other than the applicable standard service order and line connection charges).

Ameritech shall provide to AT&T equivalent functionality of blocking calls (e.g., 900, 976 and international calls) as provided to Ameritech's retail Customers.

4.2.5 When ordering a Local Switching Element, AT&T may order from Ameritech separate interLATA and intraLATA capabilities (i.e., 2 PICs where available) on a line or trunk basis.

4.2.6 Unless otherwise directed by AT&T and to the extent technically feasible, when AT&T orders a Network Element or Combination, all pre-assigned trunk or telephone numbers currently associated with that Network Element or Combination shall be retained without loss of feature capability.

4.3 Tandem Switching.

4.3.1 Tandem Switching creates a temporary transmission path between interoffice trunks that are interconnected at a switch for the purpose of routing a call or calls. Unbundled Tandem Switching is ordered using electronic interfaces. Trunk-side ports are ordered using the Access Service Request ("ASR") which provides for electronic ordering based on industry standards adopted through OBF. ASR is the process used as of the Effective Date to order Exchange Access Services. Both pre-ordering and ordering functions and access to associated Operations Support Systems functions are supported electronically through these interfaces.

4.3.2 Ameritech will service, operate, and maintain the unbundled Tandem Switching for AT&T at parity with the service, operation, and maintenance Ameritech provides to itself, its subsidiaries, Affiliates and any other person. Unless requested otherwise, where applicable and technically feasible, Ameritech will provide unbundled Tandem Switching using the same specifications, interfaces, parameters, intervals, procedures and practices it uses to provide comparable Tandem Switching for all other Customers and carriers. Any feature or function existing in the Tandem Switch will be provided to AT&T on a non-discriminatory basis. Congestion control and overflow routing will be provided on a non-discriminatory basis.

4.3.3 Tandem Switching performance will be measured to ensure parity with all other Telecommunications Carriers that are interconnected with Ameritech. Performance will be measured on switching, call recording, and network management controls.

4.3.4 Switch downtime will be measured through FCC reportable incidents report. CPI Index will be measured calls blocked and customer out of service incidents.

4.3.5 Electronic Billing Accuracy Centers (EBAC) measures billing errors from the CABS error hold file report. Ameritech employs RAVE/A&T which enables on-line investigation of AMA volumes and will alert EBAC to possible AMA recording failures.

4.3.6 Congestion Control and overflow criteria are set by the use of NTMOS Surveillance system which polls EDAS and NMA data on call volumes and make busy standards. Ameritech sets automatic thresholds with preplan routing and overflow selection. The system is also monitored via a manual surveillance system early recognition of performance problems.

5.0 Interoffice Transmission Facilities.

Ameritech shall:

5.1 Provide AT&T exclusive use of Interoffice Transmission Facilities dedicated to AT&T, or use of the features, functions, and capabilities of Interoffice Transmission Facilities shared by more than one Customer or carrier, including AT&T;

5.2 Provide all technically feasible transmission facilities, features, functions, and capabilities that AT&T could use to provide Telecommunications Services;

5.3 Permit, to the extent technically feasible, AT&T to connect such interoffice facilities to equipment designated by AT&T, including AT&T's Collocated facilities; and

5.4 Permit, to the extent technically feasible, AT&T to obtain the functionality provided by Ameritech's digital cross-connect systems separate from dedicated transport.

6.0 Signaling Networks and Call-Related Databases

6.1 Signaling Networks.

6.1.1 If AT&T purchases Switching Capability from Ameritech, Ameritech shall provide access to its signaling network from that switch in the same manner in which Ameritech obtains access to such switch itself. In addition, Ameritech shall provide AT&T access to Ameritech's signaling network for each of AT&T's switches when AT&T uses its own switching facilities. This connection shall be made in the same manner as Ameritech connects one of its own switches to an STP. Notwithstanding the foregoing, Ameritech shall not be required to unbundle those signaling links that connect Service Control Points to STPs or to permit AT&T to link its own STPs directly to Ameritech's switch or call-related databases.

6.1.2 If AT&T has its own switching facilities, Ameritech shall provide AT&T access to STPs to each of AT&T's switches, in the same manner in which Ameritech connects one of its own switches to an STP, or in any other technically feasible manner (e.g., bringing an "A" link from AT&T's switch to Ameritech's STP, or linking AT&T's switch to its own STP and then connecting that STP to Ameritech's STP via a "B" or "D" link); provided that Ameritech shall not be required to (i) unbundle the signaling link connecting SCPs to STPs, (ii) permit direct linkage of AT&T's own STPs to Ameritech's switch or call-related databases or (iii) unbundle an SCP from its associated STP.

6.1.3 The Parties shall agree upon appropriate mediation facilities and arrangements for the Interconnection of their signaling networks and facilities, as necessary to adequately safeguard against intentional and unintentional misuse of the signaling networks and facilities of each Party. Such arrangements shall provide at a minimum:

- Certification that AT&T's switch is compatible with Ameritech's SS7 network;
- Certification that AT&T's switch is compatible with Ameritech's AIN SCP;
- Certification that AT&T's switch is compatible with a desired AIN application residing on Ameritech's SCP;
- Agreement on procedures for handling maintenance and troubleshooting related to AIN services;
- Usage of forecasts provided by AT&T, so that Ameritech can provide sufficient SS7 resources for AT&T and all other requesting carriers;
- Mechanisms to control signaling traffic at agreed-upon levels, so that Ameritech's SS7 resources can be fairly shared by all requesting carriers;
- Mechanisms to restrict signaling traffic during testing and certification, as necessary to minimize risks to the service quality experienced by Customers served by Ameritech's network and those of other carriers while compatibility and interconnection items are verified; and
- Mechanisms to ensure protection of the confidentiality of Proprietary Information of both carriers and Customers.